Aspire M1610/Veriton M261

Service Guide

Service guide files and updates are available on the AIPG/CSD web; for more information, please refer to <u>http://csd.acer.com.tw</u>

PRINTED IN TAIWAN

Revision History

Please refer to the table below for the updates made on Aspire M1610/VeritonM261service guide.

Date	Chapter	Updates

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Conventions

The following conventions are used in this manual:

SCREEN MESSAGES	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

- 1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
- 2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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System Specifications

Features

Operating System

• Microsoft Windows Vista (Home Basic, Home Premium, Business)

Processor

- Socket Type: Intel[®] Socket T LGA 775 pin
- Processor Type:
 - Intel[®] Core 2 Duo 755 FSB 800/533 MHz
 - Intel[®] Pentium 4/D 775 FSB 800/533 MHz
 - Intel[®] Celeron/Celeron D775 FSB 800/533 MHz

Chipset

• SiS 672+968

РСВ

- Form Factor: Mirco ATX
- Dimension/ Layer: 244mm x 221mm/4 layer

Memory

- Memory Type : DDRII 667/533/400
- Support single channel 64 bit mode with maximum memory size up to 2GB
- Support un-buffered DIMMs only
- DIMM Slot : 2
- Memory Max.: Support 128MB, 256MB, 512MB and 1GB DDR memory technologies
- Cpapcity :Up to 1 GB per DIMM with maximum memory size up to 2 GB

Graphics

- SiS 3+ GUI 2D/3D Graphic solution
 - DX9 Shader Model 2.0 Dual Pixel Shading pipeline support
 - 1 VGA port on rear

PCI

- PCI Express Slot Type:
 - PCI Express x16 Slot Quantity: 1
 - PCI Express x1 Slot Quantity: 1
- PCI Slot Type: PCI 2.3, 5V Slots
- PCI Slot Quantity: 2

FDD

- Slot Quantity: 1
- Support 3.5" Devices

IDE

- Slot Type: 40 pin PATA IDE slot
- Slot Quantity: 1
- Transfer rate support:
 - PIO mode: 0/1/2/3/4
 - ATA mode: 33/66/100 port supported
- Slot Type: SATA slot
- Slot Quantity: 2
- Transfer rate support: SATA 1.5 Gb/s and SATA 3.0 Gb/s
- Storage Type support: HDD/CD-ROM/CD-RW/DVD-ROM/DVD-RW/DVD+RW/DVD Dual/DVD SuperMultiPlus

Audio

- Audio Type: HD audio codec
- Audio Channel: 7.1 channel
- Audio Controller: Realtek ALC888S
- Audio Chip: HD audio codec ALC888S HD codec 7.1 w/ S/PDIF out
- Support S/PDIF: S/PDIF out
- ATAPI analog line-level stereo inputs for AUX_IN

LAN

- Type: RealTek 8211BL
- Supports 10/100/1000MB Ethernet environment
- Support power down mode

IEEE 1394 (Reserved)

- IEEE 1394 Controller: Ti TSB43AB23PDTG4
- IEEE 1394 Port: 1 for rear I/O port
- On board connector: 1(2x5 pin)

USB

- Controller: SiS 968
- USB Type: 2.0/1.1
- Connectors Quantity:
 - 4 for rear I/O ports
 - On-board header: 2 for front daughter board / 1 for sharing 2 rear USB port)

BIOS

- BIOS Type: Phoenix Award BIOS
- 4MB Flash BIOS
- Award PnP BIOS compatible with SM BIOS 2.4

- ACPI 2.0,
- Provides DMI 2.0, WFM 2.0, WOL, and SM Bus for system management.

I/O Connector

Controller: Super I/O ITE 8718F-FX with hardware monitor

Rear I/O Connector

- 1 PS/2 Keyboard Port
- 1 PS/2 Mouse Port
- 1 Parallel Port
- 1 Serial Port
- 1 VGA Port
- 1 10/100/1000 LAN Port (RJ-45)
- 1 1394 Port
- 4 USB Ports
- 6 jacks follow HD audio definition

Onboard Connector

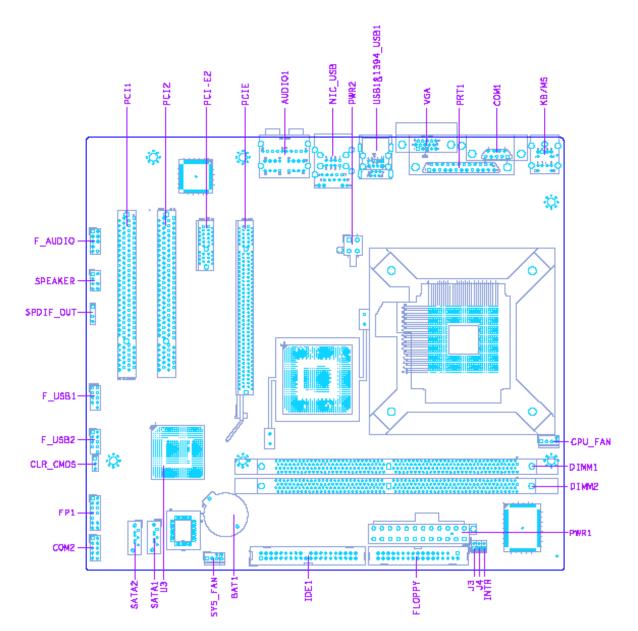
- 1 CPU socket
- 2 Memory slots
- 1 PCI Express x 16 slot
- 1 PCI Express x 1 slot
- 2 PCI slots
- 1 FDD slot
- 1 PATA IDE slot
- 2 SATA IDE connectors
- 3 2x5 pin Intel FPIO specification USB pin connectors.
- 1 2x5 pin Intel FPIO spec. Microphone In/Headphone Out pin connectors
- 1 serial port 2x5 pin connector
- 1 AUX-In 4pin connector
- 1 S/PDIF out 1x4pin connector
- 1 4pin CPU Fan connector

Power Supply

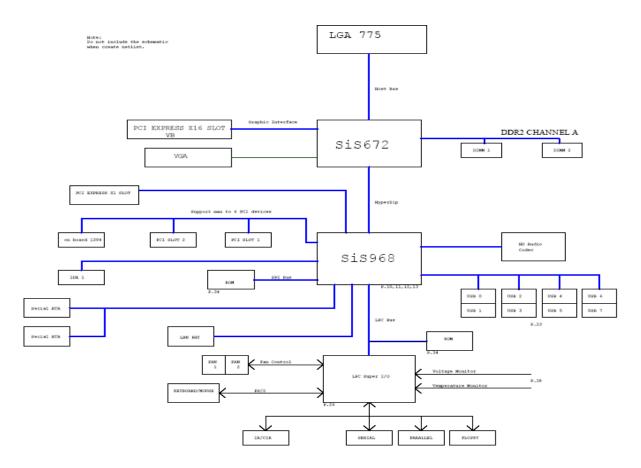
• PSP Type: 250W

- 1 3pin system fan connector
- 1 24pin ATX interface PS3/PS2 SPS connector
- 1 2x7pin front panel IO header
- 2 reserved 2pin GPIO connector
- 1 on board buzzer
- 1 1x3 pin Clear COM pin
- 1 RM
- Color management for on board connector
- Reserve position for 1 2*5pin 1394 connector
- Reserved 1 2x5pin IRDA
- 1 2x2pin CPU SPS connector
- 1 2x4 pin Internal speaker header
- 1 2x5pin 1394 connector

Mainboard Placement

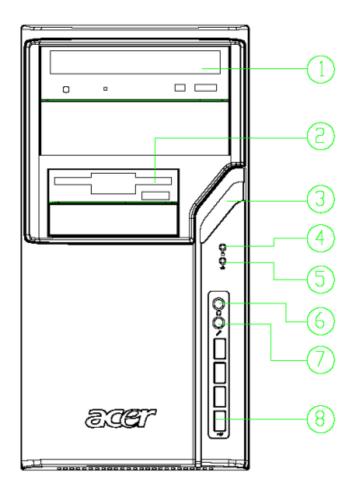


Block Diagram



Aspire M1610 Front Panel

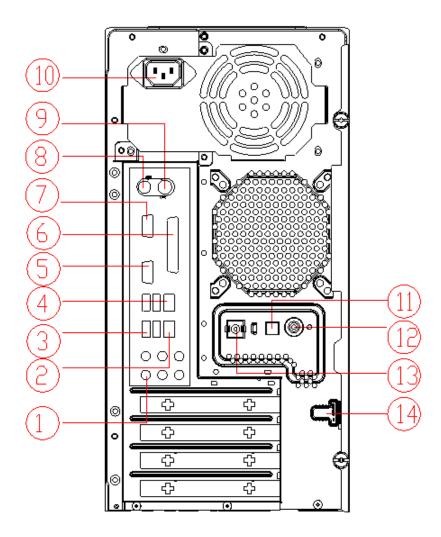
The computer's front panel consists of the following:



Label	Description
1	Optical Device
2	3.5 inch Device
3	Power button
4	HDD LED
5	LAN LED
6	Speaker Out
7	Microphone
8	USB Port

Aspire M1610 Rear Panel

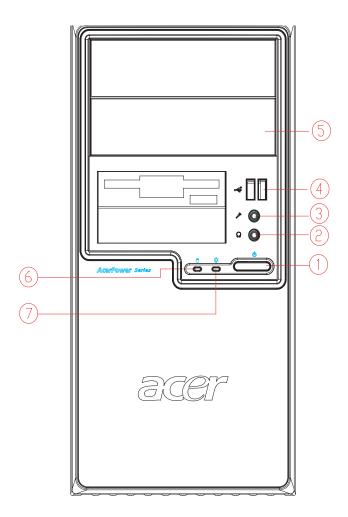
The computer's rear panel consists of the following:



Label	Description	Label	Description
1	6 audio jacks (7.1 HD audio jack)	2	LAN Port
3	USB PORTS	4	1394 Port
5	CRT/LCD port	6	Parallel port
7	COM port	8	PS/2 keyboard
9	PS/2 mouse	10	Power cord Port
11	SPDIF Bracket	12	SPDIF Port
13	Recovery Switch Holder	14	Lock Handle

Veriton M261 Front Panel

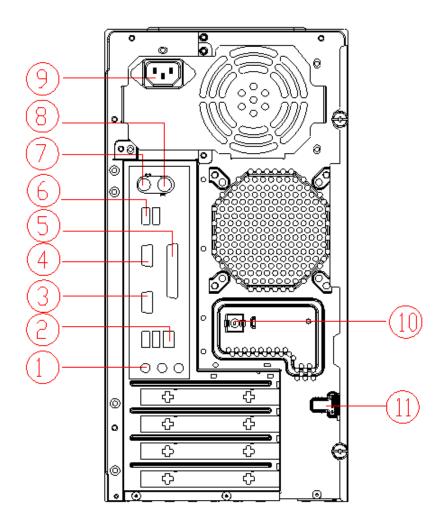
The computer's front panel consists of the following:



Label	Description	
1	Power-Button	
2	Speaker-out/Line-out Port	
3	Microphone-in out (Front)	
4	USB Ports	
5	Optical drive	
6	HDD LED	
7	Power LED	

Veriton M261 Rear Panel

The computer's rear panel consists of the following:



Label	Description	Label	Description
1	3 audio jacks	2	RJ45 port
3	CRT/LCD port	4	Serial port
5	Parallel port	6	USB PORTS
7	PS/2 keyboard	8	PS/2 mouse
9	Power cord Port	10	Recovery Switch Holder
11	Lock Handle		

Hardware Specifications and Configurations

Processor Support

- Intel Core 2 Duo 755 FSB 800/533 MHz
- Intel Pentium 4/D 775 FSB 800/533 MHz
- Intel Celeron/Celeron D 775 FSB 800/533MHz

System Memory Interface

Single Channel Memory Controller

- Supports DDR2-667/533/400
- Supports two DIMMs
- Up to 1GB per DIMM with maximum memory size up to 2GB
- Supports Single Channel 64 bit mode with maximum memory bandwidth of 5.3GB/s (DDR2-667).
- Supports un-buffered DIMMs only.
- Supports up to 8 banks for DDR2 devices
- Supports 256Mb, 512Mb and 1Gb device technologies for x8 and x16 DDR2 devices
- Supports DDR2 CAS Latency at options of 3, 4 & 5 clocks.
- Support Dynamic Power Down Mode
- Support On-Die-Termination for DDR2
- Support Differential DQS Pair

System Clock

All clocks are generated by 671FX and CLK GEN(ICS9LPR600CGLF-T) including:

Item	Clock Speed	
Host	133/200/266MHz (System Bus 533/800MHZ)	
Memory system	DDR2: 400/533/667 MHz,	
PCI	33 MHz	
PCI Express	100 MHz	
USB	12 MHz	
1394	33MHz	
SIO	33,48 MHz	
968	14.318, 25, 33, 48, and 100 MHz	
RTC	32.768 KHz	
LAN	25MHz	
Audio Codec	24 MHz	

SIS672 Chipset

SIS672 Host/Memory Controller

SIS 672 is a Host/Memory Controller designed for use with a LGA775 (Land Grid Array) Socket T processor. The SIS672 provides the CPU interface, DDR2 interface, PCI Express interface, and communicates with SiS 968 MuTIOL 1G Media I/O Interface.

Features of the SIS 671FX chipset family board products include:

- 847 ball FC-BGA package
- Single processor support with 533/800 MHz data transfer rate

- The smallest memory capacity possible is 128 MB, assuming Single-Channel Mode by using 256-Mb technology
- Supports high throughput MuTIOL (Multi-Threaded I/O Link)
- PCI-Express x16 Graphics interface
- One 16-lane PCI Express port intended for Graphics attach, fully compliant to the PCI Express Base Specification revision 1.0a
- On board VGA support with High-performance DX9

Refer to the Intel SIS672 chipset platform Design Specification for more information

SiS 968 MuTIOL 1G Media I/O

The SiS 968 MuTIOL 1G Media I/O is the other main component of the SIS 671FX chipset that integrates many I/O functions and provides the I/O subsystem with access to the rest of the platform. 968 features on the SIS 671FX chipset family board products include:

- 570-pin BGA package
- High Performance SiS MuTIOL 1G Technology Interconnecting SiS North Bridge and South Bridge Chips
- PCI Local Bus Specification, Revision 2.3-compliant with support for 33 MHz PCI operations (supports up to seven Req/Gnt pairs)
- Compliant with PCI Express 1.1
- 1-channel Ultra ATA / 100 Bus Master IDE controller
- ACPI Power Management Logic Support
- Integrated serial ATA host controller with independent operation on 2 ports and AHCI support
- Two Independent OHCI USB 1.1 Host Controllers and One EHCI USB 2.0 Host Controller, support up to eight ports
- Supports Azalia Specification
- Low Pin Count (LPC) interface
- I/O APIC 2.0

Refer to the RS — SiS 968 MuTIOL 1G Media I/O Design Specification for more details

Super I/O — IT8718F

- Meet LPC Spec 1.0
- Support PS/2 Keyboard & Mouse
- Support up to four 3.5-inch disk drives
- Support two serial ports, one EPP/ECP parallel port
- Support two fans (2 fan speed control, 2 fan speed monitoring inputs)
- Support IrDA 1.0/ASKIR protocol
- Hardware Monitor supported

Audio Sub-Systems — Realtek ALC888SCo-lay ALC888

The SIS 672 chipset family board products will implement integrated audio support using the SiS 968 MuTIOL 1G Media I/O integrated audio controller. The six channel analog CODEC and audio connectors are optionally supported on the desktop board. The audio sub-system includes:

- AC '97 2.3 /Azalia compliant
- Jack sensing supported.
- Realtek ALC888SCo-lay ALC888 CODEC

- Audio Connectors/Headers
- ATAPI analog line-level stereo outputs for Internal Speaker
- Vertical connector for three mini-audio jacks (Stereo Line In, Stereo LINE Out, Stereo Microphone In)
- Header for Stereo Line out and Mono Microphone In for front panel cabling option that adheres to the Intel® Front Panel I/O Connectivity Design Guide

LAN — Realtek8211BL(default) co-lay 8201CL phy

- Integrated 10/100/1000BASE-T transceiver
- Automatic MDI crossover function
- 10/100/1000BASE-T full-duplex/half-duplex MAC
- Support power down mode
- 100-pin LQFP package for 8211BL
- 48-PQFP package for 8201CL

Universal Serial Bus

- 8 USB 2.0 ports support
- Dual stack with RJ-45 back panel connector
- Dual stack with 1394 connector in rear side
- 2 header supporting 2 USB ports for front panel cabling

TSB43AB23PDTG4 Host Controller

- Fully compliant with provisions of IEEE Std 1394-1995 for a high-performance serial bus and IEEE Std 1394a-2000
- Fully interoperable with FireWire and i.LINK implementations of IEEE Std 1394
- Three IEEE Std 1394a- 2000 fully compliant cable ports at 100M bits/s, 200M bits/s, and 400M bits/s
- Two general-purpose I/Os
- PHY-link logic performs system initialization and arbitration functions
- Serial ROM interface supports 2-wire serial EEPROM devices

Expansion Slots

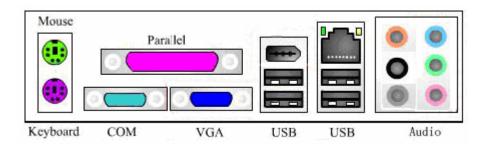
- 1 PCI Express x16 Graphics slot support
- 1 PCI Express x1 Graphics slot support
- 2 PCI Local Bus slots Compliant with PCI rev2.3 specification

Back Panel I/O

This product must follow the Standard I/O Shield Template version 1.00. The back panel I/O consists of the following:

- Dual stack PS/2 KB/MOUSE
- Parallel port
- Serial port
- VGA port
- Dual stack USB ports with 1394 connector
- Dual Stack USB ports with RJ-45 connector

High Definition Audio 6 Ports Connector with Line In, Line Out, Microphone, Surround, CEN/LFE and Side-Surround Vertical Audio connector with Line In, Line Out and Microphone



Power & Power Management

Two power management modes are supported in BIOS: Advanced Configuration and Power Interface (ACPI 2.0) or Advanced Power Management (APM 1.2).

• Supports single power/sleep button user model

Wake-Up Event	From ACPI State	Comments
Power button	S1, S3, *S4, S5	-BIOS setting
RTC alarm	S1, S3, *S4, S5	-BIOS setting
LAN	S1, S3, *S4, S5	-BIOS setting
USB	S1, S3	-BIOS setting
PCI	S1, S3, *S4, S5	via #PME signal
PS/2	S1, S3	-BIOS setting
Serial port	S1, S3, *S4, S5	-S4 and S5 support External Modem only

• OS can turn system off (Soft Off feature)

- Suspend all devices that support power down modes
- Fan speeds = On/Off
- Support ACPI S0, S1, S3, & S5 System States

*S4 implies OS support only (WinME, Win2000, WinXP)

Hardware Monitor Function

The Super I/O (ITE IT8718F) support Hardware Monitor function in below features.

- VID0-VID7 input pins for CPU Vcore identification
- Built in 8-bit Analog to Digital Converter.
- 2 thermal inputs from optionally remote thermistors or 2N3904 transistors or Pentium 4 thermal diode output
- 6 external voltage detect inputs
- 9 intrinsic voltage monitoring (typical for Vbat, +5VSB, +5VCC)
- 2 fan speed monitoring inputs
- 2 fan speed control (DC analog output)
- WATCHDOG comparison of all monitored items
- SST/PECI/AMDSII/F Support.

System BIOS

LPC Bus

The SST 49LF004B FWH or supported alternative LPCs will be implemented on the GDM03. Refer to the BIOS Specification for specific implementations.

- Pm49FL004T-33JCE
- 4Mbit symmetrical Flash

SPI Bus (default)

- W25X40VAIZ
- 4Mbit symmetrical Flash

System Utilities

Most systems are already configured by the manufacturer or the dealer. There is no need to run Setup when starting the computer unless you get a Run Setup message.

The Setup program loads configuration values into the battery-backed nonvolatile memory called CMOS RAM. This memory area is not part of the system RAM.

NOTE: If you repeatedly receive Run Setup messages, the battery may be bad/flat. In this case, the system cannot retain configuration values in CMOS.

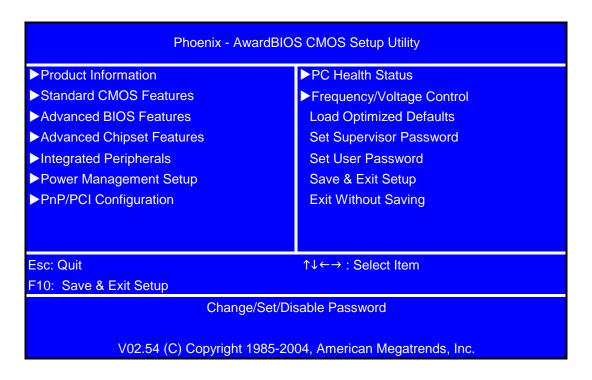
Before you run Setup, make sure that you have saved all open files. The system reboots immediately after you exit Setup.

Entering Setup

Power on the computer and the system will start POST (Power On Self Test) process. When the message of "Press DEL to enter SETUP" appears on the screen, press the key of [Delete] to enter the setup menu.

NOTE: If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On. You may also restart the system by simultaneously pressing [Ctrl+Alt+Delete].

The Setup Utility main menu then appears:



The command line at the bottom of the menu tells you how to move within a screen and from one screen to another.

- To select an option, move the highlight bar by pressing 1 or 1 then press ENTER.
- To change a parameter setting, press 🛨 or 🖻 until the desired setting is found.
- Press ESC to return to the main menu. If you are already in the main menu, press ESC again to exit Setup.

The parameters on the screens show default values. These values may not be the same as those in your system.

The grayed items on the screens have fixed settings and are not user-configured.

NOTE: Due to the application of a new version of BIOS Setup program, you may find the BIOS menu is largely different from the former models. However, you will soon find out that this version is much more compact than the former ones.

The items in the main menu are explained below:

- **Product Information** To introduce the Product Name, System P/N and MainBoard ID...etc.
- **Standard CMOS Features** The basic system configuration can be set up through this menu.
- Advanced BIOS Features The advanced system features can be set up through this menu.
- Advanced Chipset Features The values for the chipset can be changed through this menu, and the system performance can be optimized.
- Integrated Peripherals All onboard peripherals can be set up through this menu.
- **Power Management Setup** All the items of Green function features can be set up through this menu.
- **PnP/PCI Configurations** The system's PnP/PCI settings and parameters can be modified through this menu.
- **PC Health Status** This will display the current status of your PC.
- Frequency/Voltage Control Frequency and voltage settings can be loaded through this menu.
- Load Default Settings These parameter settings can be loaded through this menu, however, the stable default values may be affected.
- Set Supervisor/User Password The supervisor/user password can be set up through this menu.
- Save & Exit Setup Save CMOS value settings to CMOS and exit setup.
- Exit Without Saving Abandon all CMOS value changes and exit setup.

Product Information

The screen below appears if you select Product Information from the main menu:

The Product Information menu contains general data about the system, such as the product name, serial number, BIOS version, etc. These information is necessary for troubleshooting (maybe required when asking for technical support).

Phoenix - AwardBIOS CMOS Setup Utility		
Product Information		
Product Name	ASM1610/VTM261	Item Help
Mainboard ID	F672CR	item heip
System S/N		Menu Level 🕨 🕨
Mainboard S/N	00000000037	
System Manufacturer Name	Acer	
MB Manufacturer Name	Acer	
System BIOS Version	6.00PG	
SMBIOS Version	2.4	
System BIOS ID	756A1D01	
BIOS Release Date	06/01/2007	
↑↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit		
F1: General Help	F5: Previous Values F7: Optimized	Defaults

The following table describes the parameters found in this menu:

Parameter	Description
Product Name	Displays the model name of your system.
Main Board ID	Displays the main board's identification number.
System S/N	Displays your system's serial number.
Main Board S/N	Displays your main board's serial number.
System Manufacturer Name	Displays the manufacturer of your system.
System BIOS Version	Specifies the version of your BIOS utility.
SMBIOS version	The System Management Interface (SM) BIOS allows you to check your system hardware components without actually opening your system. Hardware checking is done via software during start up. This parameter specifies the version of the SMBIOS utility installed in your system.
System BIOS ID	Displays system BIOS identification number.
BIOS Release Date	Displays the BIOS latest release date.

Standard CMOS Features

Select Standard CMOS Features from the main menu to configure some basic parameters in your system. The following screen shows the Standard CMOS Features menu:

Phoenix - AwardBIOS CMOS Setup Utility			
Standard CMOS Features			
Date (mm:dd:yy)	Thu, Apr 12 2007	Item Help	
Time (hh:mm:ss)	10 : 32 : 39		
		Menu Level 🕨 🕨	
►IDE Channel 0 Master	[None]	Change the day, month,	
►IDE Channel 0 Slave	[None]	year and century.	
►IDE Channel 1 Master	[None]		
►IDE Channel 1 Slave	[None]		
SATA Channel 1 Master	[ST3320820AS]		
SATA Channel 2 Master	[HL-DT-STDVD-RAM GSA-]		
Drive A	None		
Video	[EGA/VGA]		
Halt On	[All, But Keyboard]		
Base Memory	640K		
Extended Memory	2096128K		
Total Memory	2097152K		
↑↓←→ :Move Enter: S	elect +/-/PU/PD:Value F10: Save an	d Exit ESC:Exit	
F1: General Help	F5: Previous Values F7: Optimize	d Defaults	

The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
Date	month-day-year format	Weekday: Sun, MonSat Month: Jan., FebDec. Day: 1 to 31 Year: 1999 to 2098
Time	g	Hour: 0 to 23 Minute: 0 to 59 Second: 0 to 59

Parameter	Description	Options
IDE Channel 0/1 Master/Slave	Leave this item at Auto to enable the system to automatically detect and configure IDE devices on the channel. If it fails to find a device, change the value to Manual and then manually configure the drive by entering the characteristics of the drive in the items described below. Please noted that if you choose IDE Channel 2/3 Master, the item may change to Extended IDE Drive. See "IDE Channel 0/1 Master" on page 21 and "IDE Channel 0/1 Slave" on page 22 for more information.	IDE Device Model Number: None
SATA Channel 1/2 Master	This item display the status of auto detection of SATA devices. See "SATA Channel 1/2 Master" on page 23 for more information.	SATA Device Model Number: None
Drive A	Allows you to configure your floppy drive A.	None 360 KB, 5.25-inch 1.2 MB, 5.25-inch 720 KB, 3.5-inch 1.44M, 3.5 - inch 2.88 MB, 3.5-inch
Video	This item specifies the type of video card in use. The default setting is VGA/EGA. Since current PCs use VGA only, this function is almost useless and may be disregarded in the future.	VGA/EGA CGA40 CGA80 Mono
Halt On	This parameter enables you to control the system stops in case of Power On Self Test errors (POST).	All Errors No Errors All, but Keyboard All, but Diskette All, by Disk/Key
Base Memory	Refers to the option of memory that is available to standard DOS programs. DOS systems have an address space od 1MB, but the top 384KB (called high memory) is reserved for system use. This leaves 640 KB of conventional memory. Everything above 1MB is either extended or extended memory.	The BIOS POST will determine the amount of base (or conventional) memory installed in the system.
Extended Memory	Memory above and beyond the standard 1MB of base memory that DOS supports. Extended memory is only available in PCs with an Intel 80286 or later microprocessor. Extended memory is not configured in any special manner and is therefore unavailable to most DOS programs. However, MS Windows and OS/2 can use extended memory.	The BIOS determines how much extended memory is present during the POST.
Total Memory	Total based and extended memory, and I/O ROM 384KB available to the system.	total memory of the system.

IDE Channel 0/1 Master

The following screen shows the IDE Channel Master menu.

NOTE: IDE Channel 0 and Channel 1 Master have the same options, the only difference is the menu title.

Phoenix - AwardBIOS CMOS Setup Utility		
IDE Channel 0 Master		
IDE HDD Auto Detection	[Press Enter]	Item Help
IDE Channel 0 Master	[Auto]	Menu Level 🕨 🕨
Access Mode	[Auto]	
Capacity	0 MB	
Cylinder	0	
Head	0	
Precomp	0	
Landing Zone	0	
Sector	0	
↑↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit		
F1: General Help F5: Previous Values F7: Optimized Defaults		

IDE Channel 0/1 Slave

The following screen shows the IDE Channel Slave menu.

NOTE: IDE Channel 0 and Channel 1 Slave have the same options, the only difference is the menu title.

Phoenix - AwardBIOS CMOS Setup Utility			
	IDE Channel 0 Slave		
IDE Auto Detection	[Press Enter]	Item H	elp
Extended IDE Drive	[Auto]	Menu Level	$\blacktriangleright \flat$
Access Mode	[Auto]		
Capacity	320 MB		
Cylinder	0		
Head	0		
Precomp	0		
Landing Zone	0		
Sector	0		
1↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit			
F1: General Help F5: Previous Values F7: Optimized Defaults			

SATA Channel 1/2 Master

The following screen shows the SATA Channel Master menu.

NOTE: SATA Channel 1 and Channel 2 Master have the same options, the only difference is the menu title.

Phoenix - AwardBIOS CMOS Setup Utility		
IDE Channel 1 Master		
IDE HDD Auto Detection	[Press Enter]	Item Help
IDE Channel 0 Master	[Auto]	Menu Level 🕨 🕨
Access Mode	[Auto]	
Capacity	0 MB	
Cylinder	65535	
Head	16	
Precomp	0	
Landing Zone	65534	
Sector	255	
$\uparrow\downarrow \leftarrow \rightarrow$:Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit		
F1: General Help	F5: Previous Values F7: Optimized	Defaults

Advanced BIOS Features

The following screen shows the Advanced BIOS Features:

Phoenix - AwardBIOS CMOS Setup Utility		
Advanced BIOS Features		
►CPU Feature	[Press Enter]	Item Help
►Hard Disk Boot Priority	[Press Enter]	Menu Level 🕨
Virus Warning	[Disabled]	
Quick Power On Self Test	[Enabled]	
First Boot Device	[Hard Disk]	
Second Boot Device	[CDROM]	
Third Boot Device	[LAN]	
Boot Other Device	[Enabled]	
Boot Up Floppy Seek	[Disabled]	
Boot Up Num Lock Status	[On]	
Typematic Rate Setting	[Disabled]	
X Typematic Rate (chars/sec)	6	
X Typematic Delay (Msec)	250	
Security Option	[Setup]	
APIC Mode	[Enabled]	
MPS Version Control For OS	[1.4]	
OS Select For DRAM > 64MB	[Non-OS2]	
HDD S.M.A.R.T. Capability	[Disabled]	
Report No FDD For Win 95	[No]	
Silent Boot	[Enabled]	
Small Logo (EPA) Show	[Disabled]	
Configuration Table	[Disabled]	
↑↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit		
F1: General Help F5: Previous Values F7: Optimized Defaults		

The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
CPU Feature	Select to display CPU Feature. See "CPU Feature" on page 26 for more information.	Press [Enter]
Hard Disk Boot Priority	Select Hard Disk Boot Device Priority. See "Hard Disk Boot Priority" on page 27 for more information.	Press [Enter]
Virus Warning	Enable this item to detect the virus in POST mode.	Enabled Disabled
Quick Power On Self Test	This parameter speeds up POST by skipping some items that are normally checked.	Enabled Disabled

Parameter	Description	Options
First /Second/Third Boot Device	The items allow you to set the sequence of boot device where BIOS attempts to load the disk operating system.	Floppy, LS120, Hard Disk, CD-ROM, ZIP100, USB-FDD, USB-ZIP, LAN, Disabled (Disable this sequence). The sequence following the order of Floppy, HDD and CD-ROM is recommended.
Boot Other Device	This parameter allows you to specify the system boot up search sequence.	Enabled Disabled
Boot Up Floppy Seek	Setting to Enabled will make BIOS seek floppy drive a: before booting the system.	Enabled Disabled
Boot Up NumLock Status	Sets the NumLock status when the system is powered on. Setting to On will turn on the NumLock key when the system is powered on. Setting to Off will allows users to use the arrow keys on the numeric keypad.	On Off
Typematic Rate Setting	This item is used to enable or disable the typematic rate setting including Typematic Rate and Typematic Delay.	Enabled Disabled
Typematic Rate (Chars/Sec)	Use this item to define how many characters per key.	second are generated by a held-down
Typematic Delay (Msec)	Use this item to define how many milliseconds must elapse before a held-down key begins gene	erating repeat characters.
Security Option	Specifies the type of BIOS password protection that is implemented. Setup means that the password prompt appears only when end users try to run Setup. System means that a password prompt appears every time when the computer is powered on or when end users try to run Setup.	Setup System
APIC Mode	This field is used to enable or disable the APIC (Advanced Programmable Interrupt Controller). Due to compliance with PC2001 design guide, the system is able to run in APIC mode. Enabling APIC mode will expand available IRQ resources from the system.	Enabled Disabled
MPS Version Control For OS	This item displays MPS version control for OS.	1.4
OS Select For DRAM > 64MB	This item is only required if you have installed more than 64MB of memory and you are running the OS/2 operating system.	Non-OS2 OS2
HDD S.M.A.R.T Capability	The S.M.A.R.T (Self-Monitoring, Analysis, and Reporting Technology) system is a diagnostics technology that monitors and predicts device performance.	Enabled Disabled
Report No FDD For Win 95	This item allows you to set if the BIOS should report the absence of a floppy disk drive to Windows 95.	No Yes
Silent Boot	Display Full Screen LOGO during POST	Enabled Disabled
Small Logo (EPA) Show	Determines whether the EPA logo appears during boot up.	Enabled Disabled
Configuration Table	Enable the Configuration Table function	Enabled Disabled

The advanced chipset features setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

NOTE: Change these settings only if you are familiar with the chipset.

CPU Feature

The following screen shows the CPU Features menu:

Phoenix - AwardBIOS CMOS Setup Utility CPU Features		
Limit CPUID MaxVal C1E Function	[Disabled] [Auto]	Item Help
Execute Disable Bit	[Enabled]	Menu Level 🕨
1 ↑↓←→ :Move Enter:	Select +/-/PU/PD :Value F10: Sa	ve and Exit ESC:Exit
F1: General Hel	p F5: Previous Values F7: Opt	imized Defaults

Hard Disk Boot Priority

The following screen shows the Hard Disk Boot Priority menu:

Phoenix - AwardBIOS CMOS Setup Utility Hard Disk Boot Priority		
1. Ch2 M. : ST3320820AS 2. Bootable Add-in Cards	Item Help	
	Menu Level 🕨 🕨	
	Use <1> or <↓> to	
	select a device, then	
	press <+> to move it	
	up, or <-> to move it	
	down the list. Press	
	<esc> to exit this</esc>	
	menu.	
1↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit		
F1: General Help F5: Previous Values F7: Optimized Defaults		

Advanced Chipset Features

The following screen shows the Advanced Chipset Features menu:

Phoenix - AwardBIOS CMOS Setup Utility		
Advanced Chipset Features		
Internal Graphic Control Memory Hole at 15M - 16M	[Press Enter] [Disabled]	Item Help
		Menu Level 🕨
1000 € The ter: Se	elect +/-/PU/PD :Value F10: Save an	d Exit ESC:Exit
F1: General Help	F5: Previous Values F7: Optimize	d Defaults

Parameter	Description	Option
Internal Graphic Control	This submenu is used to set some parameters of graphics memory controller. See "Internal Graphic Control" on page 29 for more information.	[Press Enter]
Memory Hole at 15M-16M	In order to improve performance, certain space in memory is reserved for ISA cards. This memory must be mapped into the memory space below 16MB.	15-16MB 14-16MB Disabled

Internal Graphic Control

The following screen shows the Internal Graphic Control menu:

Phoenix - AwardBIOS CMOS Setup Utility Internal Graphic Control		
VGA Share Memory Mode	[Auto]	Item Help
X VGA Share Memory Size	256 MB	
Graphic Engine Clock	250 MHz	Menu Level 🕨 🕨
Graphic Memory Clock	250 MHz	
AGP Aperture Size	[64 MB]	
↑↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit		
F1: General Help F5: Previous Values F7: Optimized Defaults		

Integrated Peripherals

The following screen shows the Integrated Peripherals Features:

Phoenix - AwardBIOS CMOS Setup Utility			
Integrated Peripherals			
►Onboard IDE Device	[Press Enter]	Item Help	
Onboard PCI Device	[Press Enter]	Rentholp	
Onboard Super IO Device	[Press Enter]	Menu Level 🕨 🕨	
↑↓ \leftarrow → :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit			
F1: General Help F5: Previous Values F7: Optimized Defaults			

Parameter	Description	Option
Onboard IDE Device	, , , , , , , , , , , , , , , , , , , ,	[Press Enter]
Onboard PCI Device	press < Enter > key to enter the setup sub- menu. The menus and options are shown	[Press Enter]
Onboard Super IO Device		[Press Enter]

Onboard IDE Device

The following screen shows the Onboard IDE Device menu:

Phoenix - AwardBIOS CMOS Setup Utility				
	Onboard IDE Device			
Serial ATA Mode	[2P+2S(IDE)]	Item Help		
IDE Primary Master PIO	[Auto]	Renthelp		
IDE Primary Slave PIO	[Auto]	Menu Level 🕨 🕨		
IDE Secondary Master PIO	[Auto]			
IDE Secondary Slave PIO	[Auto]			
Primary Master UltraDMA	[Auto]			
Primary Slave UltraDMA	[Auto]			
Secondary Master UltraDMA	[Auto]			
Secondary Slave UltraDMA	[Auto]			
IDE DMA Transfer Access	[Enabled]			
1↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit				
F1: General Help F5: Previous Values F7: Optimized Defaults				

Onboard PCI Device

The following screen shows the Onboard PCI Device menu:

Phoe	nix - AwardBIOS CMOS Setup Utility		
Onboard PCI Device			
USB Controller	[Enabled]	Item Help	
USB 2.0 Supports	[Enabled]	Rentholp	
USB Keyboard Support	[Enabled]	Menu Level 🕨 🕨	
USB Mouse Support	[Enabled]		
Azalia Audio Controller	[Azalia]		
Onboard LAN Controller	[Enabled]		
Onboard Lan Boot ROM	[Enabled]		
10×++++ the two texts texts the texts texts texts and the texts are texts and texts texts and texts texts are texts and texts are texts	elect +/-/PU/PD :Value F10: Save ar	nd Exit ESC:Exit	
F1: General Help	F5: Previous Values F7: Optimize	d Defaults	

Onboard Super IO Device

The following screen shows the Onboard Super IO Device menu:

Phoenix - AwardBIOS CMOS Setup Utility Onboard Super IO Device			
Onboard FDC Controller Onboard Serial Port 1	[Enabled] [3F8/IRQ4]	Item He	elp
Onboard Serial Port 2	[2F8/IRQ3]	Menu Level	••
UART Mode Select	[Normal]		
X UR2 Duplex Mode	Half		
Onboard Parallel Port	[378/IRQ7]		
ECP Mode Use DMA	[3]		
↑↓←→ :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit			
F1: General Help F5: Previous Values F7: Optimized Defaults			

Power Management

The Power Management menu lets you configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use.

The following screen shows the Power Management parameters and their default settings:

Phoenix - AwardBIOS CMOS Setup Utility			
Power Management Setup			
ACPI function	[Enabled]	Item Help	
ACPI Suspend Type	[S3(STR)]	Rentholp	
Video Off in Suspend	[Yes]	Menu Level 🕨 🕨	
Video Off Method	[V/H SYNC+Blank]		
MODEM Use IRQ	[AUTO]		
HDD Power Down	[Disabled]		
Soft-Off by PWR-BTTN	[Delay 4 sec]		
PWRON After PWR-Fail	[Former-Sts]		
Power On By Ring	[Disabled]		
Wakeup By LAN PME	[Disabled]		
LAN Remote Wakeup	[Disabled]		
Wakeup By PME	[Disabled]		
Wakeup By USB KB/MS	[Enabled]		
Wakeup By PS2 KB/MS	[Enabled]		
Resume By Alarm	[Disabled]		
X Month Alarm	NA		
X Day of Month Alarm	0		
X Time (hh : mm : ss) Alarm	0:0:0		
HPET Support	[Enabled]		
HPET Mode	[32-bit Mode]		
↑↓ \leftarrow → :Move Enter: Select +/-/PU/PD :Value F10: Save and Exit ESC:Exit			
F1: General Help F5: Previous Values F7: Optimized Defaults			

The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
	This item is to activate the ACPI (Advanced Configuration and Power Management Interface) Function. If your operating system is ACPI aware, such as Windows 98SE/ 2000/Me, select Enabled.	Enabled Disabled

Parameter	Description	Options
ACPI Suspend Type	This item specifies the power saving modes for ACPI function. S1(POS): The S1 sleep mode is a low power state. In this state, no system context (CPU or chipset) is lost and hardware maintains all system context. S3 (STR): The S3 sleep mode is s power-down state in which power is supplied only to essential components such as main memory and wake-capable devices and all system context is saved to main memory. The information stored in memory will be used to restore the PC to the previous state when an <i>wake-up</i> event occurs. S1&S3: Both S1 and S3 will be adopted.	S1 (POS) S3 (STR) S1&S3
Video Off in Suspend	This option is used to set video mode in suspend status. The setting values are Yes and No.	Yes No
Video Off Method	This item determines the manner in which the monitor is blanked. V/H SYNC+Blank: This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer. Blank Screen: This option only write blanks to the video buffer. DPMS Supported: Initial display power management signaling.	Blank Screen V/H SYNC+Blank DPMS
Modem Use IRQ	This setting names the interrupt request (IRQ) line assigned to the modem (if any) on your system. Activity of selected IRQ always awakens the system.	Auto 3,4,5,7,9,10,11
HDD Power Down	This option is used to define the continuous HDD idle time before the HDD enters power saving mode. The setting values are disabled and 1 min to 15 min.	Disabled 1,2,3,4,5,6,7,8,9,10,11,1 2,13,14,15 Min
Soft-off by PWR-BATTN	This option is used to set the power down method. This function is only valid for systems using an ATX power supply. When ""instant off" is selected, press the power switch to immediately turn off power. When "delay 4 sec" is selected, press and hole the power button for four seconds to turn off power.	Instant Off Delay 4 Sec.
PWRON After PWR-Fail	This item allow user set the machine power state when connect the AC power. "Always off" means the machine is always off when power on; "Always on" means the machine will always power on when connect the AC power; "Pre-State" means the machine state is the same as the last state.	Always Off Always On Pre-State
Power On By Ring	These items allow users to customize how the system	Disabled
Wakeup By LAN PME	behaves in standby mode. The separate items are set to Enabled or Disabled to determine whether the specified	Disabled
LAN Remote Wakeup	action wakes up the system.	Disabled
Wakeup By PME		Disabled
Wakeup By USB KB/MS		Enabled
Wakeup By PS2 KB/MS		Enabled
Resume By Alarm	When enabled, this item activates the Month, Day, and Time fields. Setting these fields causes the system to wakeup on the specified date and time.	Disabled Enabled
HPET Support	This item enables or disables support for the High Precision Event Timer (HPET).	Enabled Disabled
HPET Mode	This item sets the High Precision Event Timer (HPET) mode.	32-bit Mode 64-bit Mode

PnP/PCI Configuration

The following screen shows the PnP/PCI Configuration parameters and their default settings:

Phoenix - AwardBIOS CMOS Setup Utility			
PnP/PCI Configurations			
PCI/VGA Palette Snoop	[Disabled]	Item Help	
PCI Express relative items		Menu Level 🕨 🕨	
Maximum ASPM Supported	[L0s&L1]		
Maximum Payload Size	[4096]		
↑↓←→ :Move Enter: Se	elect +/-/PU/PD :Value F10: Save ar	d Exit ESC:Exit	
F1: General Help	F5: Previous Values F7: Optimize	ed Defaults	

Parameter	Description	Options
PCI/VGA Palette Snoop	Disabled - Data read or written by the CPU is only directed to the PCI VGA device's palette registers. Enabled - Data read or written by the CPU is directed to both the PCI VGA device's palette registers and the ISA VGA device's palette registers, permitting the palette registers of both VGA devices to be identical.	Disabled Enabled *If any ISA bus adapter in the system requires VGA Palette snooping, the setting must be set to "Enabled".
Maximum ASPM Supported	This item specifies the maximum ASPM supported for the PCI Express function.	LOS&L1 LO LOS L1
Maximum Payload Size	This item specifies the maximum payload size for the PCI Express function.	4096

PC Health Status

The following screen shows the PC Health Status parameters and their default settings:

Phoenix - AwardBIOS CMOS Setup Utility			
PC Health Status			
CPU Warning Temperature	[70°C/150°F]	ltem Help	
CPU Shutdown Temperature	[90°C/194°C]		
SYS Shutdown Temperature	[70°C/150°F]	Menu Level 🕨	
CPU Core Voltage	1.28V		
DIMM Voltage	1.77V		
+3.3V	11.84V		
+5.0V	4.91V		
+12V	11.96V		
CPU Temperature	21°C		
SYS Temperature	36°C		
CPU Fan Speed	881 RPM		
SYS Fan Speed	919 RPM		
Smart FAN Control	[Enabled]		
↑↓←→ :Move Enter: Sele	ect +/-/PU/PD:Value F10: Save a	and Exit ESC:Exit	
F1: General Help	F5: Previous Values F7: Optimiz	ed Defaults	

The following table describes the parameters found in this menu:

Parameter	Description	Options				
CPU Warning Temperature	This item lets you select the temperature at which you want the system to send out a warning message to the PC speakers of when the temperature goes beyond either limit.	Disabled				
CPU Shutdown Temp.	This option is for setting the shutdown temperature I the processor reaches the temperature you set, the	•				
SYS Shutdown Temp.	This option is for setting the shutdown temperature level for the system. When the system reaches the temperature you set, the ACPI-aware system will be shut down.					
CPU Core Voltage to SYS Fan Speed	These items in light blue show various current system voltage, temperature, and speed measurements. These items are read only and cannot be altered.					
Smart FAN Control	Enable smart fan control function. When the CPU temperature is higher than 65 degrees Celsius, CPU fan will run at full speed. The speed of CPU fan will increase linearly depend on the temperature if the temperature is more than 41 degree and less than 65 degree. When the CPU temperature is lower than 40 degrees Celsius, CPU fan will be disable.	Enabled Disabled				

Frequency/Voltage Control

The following screen shows the Frequency and Voltage Control parameters and their default settings:

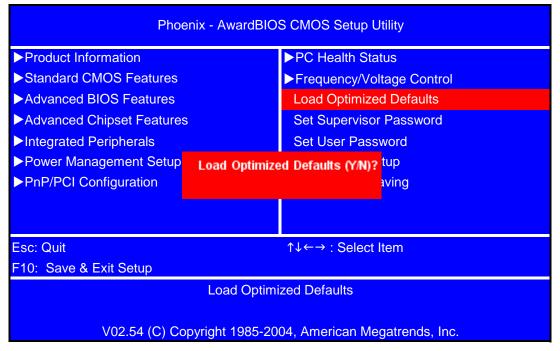
Phoenix - AwardBIOS CMOS Setup Utility						
Frequency/Voltage Control						
Auto Detect DIMM/PCI Clk	[Enabled]	Item Help				
Spread Spectrum	[Disabled]					
		Menu Level 🕨				
	Select +/-/PU/PD :Value F10: Save a	nd Exit ESC:Exit				
F1: General Help	F5: Previous Values F7: Optimize	ed Defaults				

The following table describes the parameters found in this menu. Settings in **boldface** are the default and suggested settings.

Parameter	Description	Options
Auto Detect DIMM/PCI Clk	This option allows you to enable/disable the feature of auto detecting the clock frequency of the installed PCI bus.	Enabled Disabled
Spread Spectrum	When the motherboard's clock generator pulses, the extreme values (spikes) of the pulses creates EMI (Electromagnetic Interference). The spread Spectrum function reduces the EMI generated by modulating the pulses so that the spikes of the pulses are reduced to flatter curves. If you do not have any EMI problem, leave the setting at Disabled for optimal system stability and performance. But if you are plagued by EMI, setting to Enabled for EMI reduction. Remember to disable Spread Spectrum if you are overlocking because even a slight jitter can introduce a temporary boost in clockspeed which may just cause your overlock ed processor to lock up.	Enabled

Load Optimized Defaults

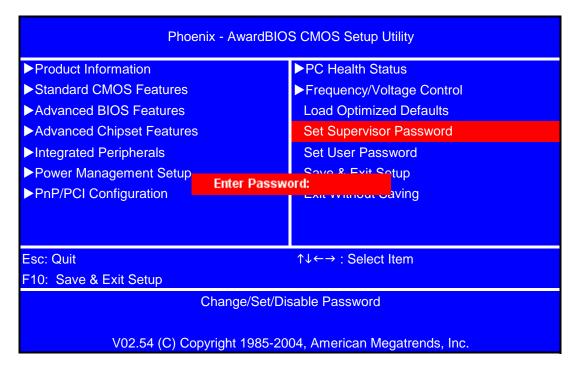
This option opens a dialog box that lets you install defaults for all appropriate items in the Setup Utility.



Press <Y> and then <Enter> to install the defaults. Press <N> and then <Enter> to not install the defaults. The defaults place demands on the system that may be greater than the performance level of the components, such as the CPU and the memory. You can cause fatal errors or instability if you install the optimized defaults when your hardware does not support them. If you only want to install setup defaults for a specific option, select and display that option.

Set Supervisor/User Password

When this function is selected, the following message appears at the center of the screen to assist you in creating a password.



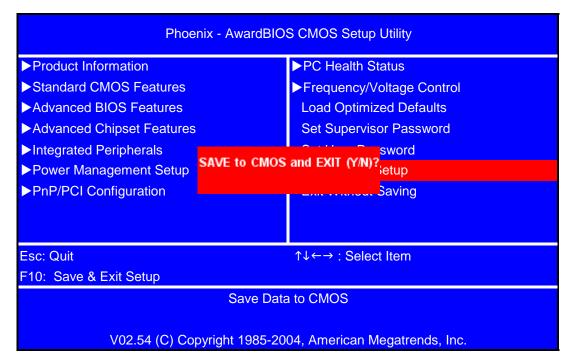
Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled

Save & Exit Setup

Highlight this item and press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility.



When the Save and Exit dialog box appears, press <Y> to save and exit, or press <N> to return to the main menu.

Exit Without Saving

Highlight this item and press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility.

Phoenix - AwardBIOS CMOS Setup Utility							
 Product Information Standard CMOS Features Advanced BIOS Features Advanced Chipset Features Integrated Peripherals Power Management Setup PnP/PCI Configuration 		Load Optim Set Supervis	Voltage Control ized Defaults sor Password				
Esc: Quit ↑↓←→ : Select Item F10: Save & Exit Setup							
Abandon All Data V02.54 (C) Copyright 1985-2004, American Megatrends, Inc.							

When the Exit Without Saving dialog box appears, press <Y> to discard changes and exit, or press <N> to return to the main menu.

NOTE: If you have made settings that you do not want to save, use the "Exit Without Saving" item and press <Y> to discard any changes you have made.

Machine Disassembly and Replacement

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge.
- Wire cutter.
- Phillips screwdriver (may require different size).

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatches when putting back the components.

General Information

Before You Begin

Before proceeding with the disassembly procedure, make sure that you do the following:

- 1. Turn off the power to the system and all peripherals.
- 2. Unplug the AC adapter and all power and signal cables from the system.

Disassembly Procedure

This section tells you how to disassemble the system when you need to perform system service. Please also refer to the disassembly video, if available.

CAUTION: Before you proceed, make sure you have turned off the system and all peripherals connected to it.

Aspire M1610/Veriton M261 Disassembly

NOTE: The only physical difference between the two models is the front bezel as shown in the procedures.

1. Place the system unit on a flat, steady surface.





Aspire M1610

Veriton M261

2. Release the Lock-handle then slide the left side door out.



3. Disconnect the VGA&TV&MODEM card.



4. Disconnect the front bezel LED cable.



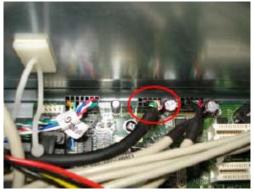
5. Disconnect the audio cables.



6. Disconnect the USB cable.



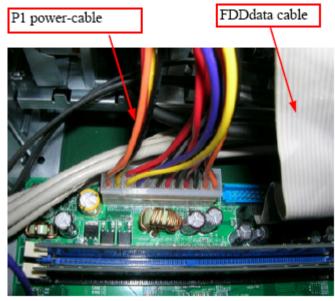
7. Disconnect the Card Reader cable.



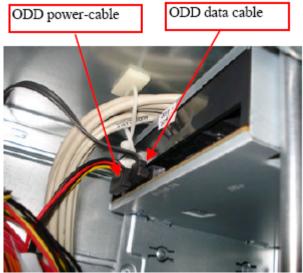
8. Disconnect the PA and PD power-cable from the MB connector.



9. Disconnect P1 power cable and FDD data cable.



10. Disconnect the ODD power and data cables.



11. Disconnect the HDD power and data cables.



12. Disconnect the System Fan power-cable from the MB connector.



13. Disconnect the HDD by railing the HDD-holder as shown. Remove the HDD from the chassis.



14. Release the three latches on the front bezel, then remove the front bezel.



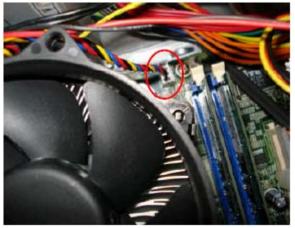
15. Disconnect the ODD by railing the ODD-holder as shown below. Remove the ODD from the chassis.



16. Release the CPU cooler from the MB by removing the four securing screws.



17. Disconnect the CPU Cooler power-cable from the MB connector.



18. Release the memory.



19. Remove the System FAN by releasing the four screws shown then removing the fan from the chassis.



20. Remove the CPU by releasing the CPU Latch on the Socket and then disconnecting the CPU.



21. Remove the motherboard by releasing the six screws shown then lifting MB clear of the chassis.



22. Remove the power-supply by releasing the four screws shown then lifting the Power-supply clear of the chassis.



Reassembly Procedure

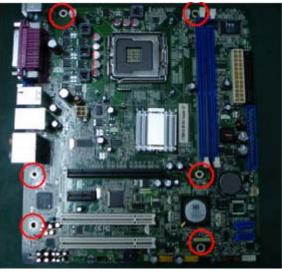
Aspire M1610/Veriton M261 Reassembly

NOTE: The only physical difference between the two models is the front bezel as shown in the procedures.

1. Install the Power-supply by fitting the Power-supply into the chassis, then fasten the four screws shown.



2. Install the mainboard by aligning the I/O connector with the chassis, making sure the M/B VIA hole fits the oriented STAND OFF on the chassis. Insert the 6 screws to hold the M/B in place as shown.



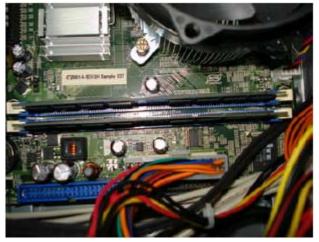
3. Install the CPU.



4. Fit the System Fan into the chassis, then fasten the four screws shown.



5. Install the Memory.



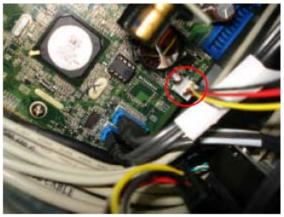
6. Fit the CPU cooler to the MB and fasten four screws shown.



7. Connect the CPU Cooler power-cable to the MB connector.



8. Connect the System Fan power-cable to the MB connector.



9. Install the ODD into the chassis and slide the ODD rail to lock it.







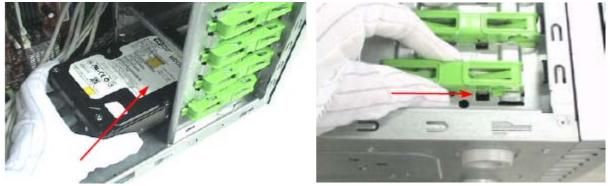
11. Install the front bezel.



Aspire M1610 Front Bezel



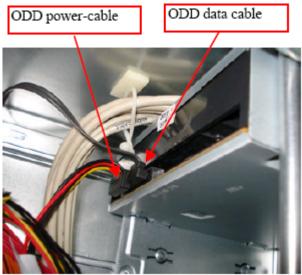
12. Install the HDD into the chassis and slide the HDD rail to lock it.



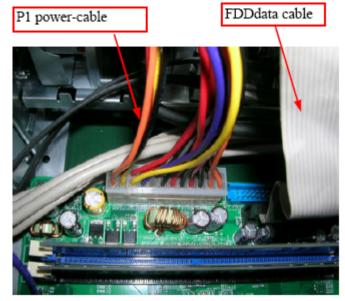
13. Connect the HDD data cable and power-cable to the rear of HDD.



14. Connect the ODD data cable and power-cable to the rear of ODD.



15. Connect the P1 power-cable and FDD data cable to the MB connector.



16. Connect the PA and PD power-cable to the MB connector.



17. Connect the USB cables.



18. Connect the Card Reader cable.



19. Connect the AUDIO cables.



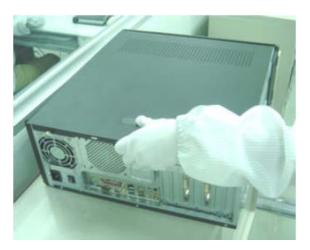
20. Connect the front bezel LED cable.



21. Install the TV&VGA&MODEM card.



22. Close the system.



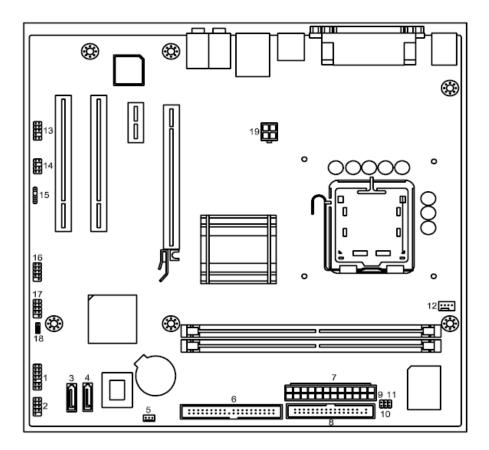
Troubleshooting

Please refer to generic troubleshooting guide for troubleshooting information relating to following topics:

- Power-On Self-Test (POST)
- POST Check Points
- POST Error Messages List
- Error Symptoms List

Jumper and Connector Information

Mainboard Jumper Locations



Item	Name	Description	Item	Name	Description
1	FP1	Front panel header	11	INTR	Chassis Intrusion alarm jumper
2	COM2	COM header	12	CPU_FAN	CPU fan power header
3	SATA2	SATA data transfer connector 2	13	F_AUDIO	Front panel Audio header
4	SATA1	SATA data transfer connector 1	14	SPEAKER	Internal speaker header
5	SYS_FAN_1	System fan header (3pin)	15	SPDIF_OUT	SPDIF out header
6	IDE1	Parallel ATA IDE channel	16	F_USB1	Front panel USB header 1
7	PWR1	M/B power connector	17	F_USB2	Front panel USB header 2
8	FLOPPY	FDD transfer channel	18	CLR_CMOS	Clear CMOS jumper
9	J3	GPIO connector	19	PWR2	CPU Power connector
10	J4	GPIO connector			

Jumper Settings

This section explains how to set jumpers for correct configuration of the mainboard.

Setting Jumpers

Use the motherboard jumpers to set system configuration options. Jumpers with more than one pin are numbered. When setting the jumpers, ensure that the jumper caps are placed on the correct pins.

System Board Jumper Setting

Featu	ires	Default setting	Remark (color and other)
	CLR_CMOS(PIN2_3)1 & default setting	2-3 : Normal (Default)	1-2 : Clear CMOS 2-3 : Normal (Default)

System Board Header Setting

Front Panel

Illustration		Pin	Signal Name	Description		
			1	1	5V_SYS	Hard disk LED pull-up(330 ohm) to 5V_SYS
1		Ο	2	2	GPIO_GRN_HDR_R	Pull-up(330 ohm) to 5V_SB_SYS and connect to SIO GPIO
	0	0		3	HDD_LED_R	Hard disk active LED
	Ο	\bigcirc		4	GPIO_YLW_HDR_R	Pull-up(330 ohm) to 5V_SB_SYS and connect to SIO GPIO
	\cap	\cap		5	GND	Reset button
	X	\cup		6	PSIN	Power Button
	\odot			7	ICH_SYS_RSTJ	ICH_SYS_RSTJ
	0	\bigcirc		8	GND	Ground
	Ā			9	5V_SYS	5V_SYS
13	\cup	\cup	14	10	KEY	Кеу
				11	NC	Reserved. Do not use
				12	5V_SB	LAN LED pull-up(330 ohm) to 5V_SB
				13	NC	Reserved. Do not use
				14	LAN_ACTJ	Lan active LED
Silk	Screen			Foot	print	Schematic Part
FP1				h2x7	'mzo10h85	HEADER_2X7_10

Front USB

Illustration	Pin	Signal Name	Description
1 🗆 🔿 2	1	VREG_FP_USBP WR0	Front Panel USB Power(Ports 0,1)
οŏ	2	VREG_FP_USBP WR0	Front Panel USB Power(Ports 0,1)
	3	USB_FP_P0-	Front Panel USB Port 0 Negative Signal
	4	USB_FP_P1-	Front Panel USB Port 1 Negative Signal
	5	USB_FP_P0+	Front Panel USB Port 0 Positive Signal
9 0 10	6	USB_FP_P1+	Front Panel USB Port 1 Positive Signal
	7	Ground	
	8	Ground	
	9	Кеу	
	10	Ground	
Silk Screen	Foot	print	Schematic Part
F_USB?	H2X	5MZO9	HEADER_2X5_9

Front Audio

	IIIu	Istratio	<mark>on</mark>	Pin	Signal Name	Description
			1	1	MIC2-L	Front Panel Microphone input signal
1		\cap	2	2	AUD_GND	Ground used by Analog Audio Circuits
_		\leq	4	3	MIC2-R	Microphone Power
		Ö		4	AUD_PRESENCE_ L	Filtered +5V used by Analog Audio Circuits
	ΙŪ.	\cup		5	LINE2-R	Right Channel Audio signal to Front Panel
	0			6	MIC2-JD	Right Channel Audio signal Return from Front Panel
9	0	Ο	10	7	FRONT-IO-SENSE	RSVD for future use to control Headphone Amplifier
			1	8	Кеу	No Pin
				9	LINE2-L	Left Channel Audio signal to Front Panel
				10	LINE2-JD	Left Channel Audio signal Return from Front Panel
Silk	Screen			Foot	print	Schematic Part
F_A	UDIO			h2x	5mzo8_1h86	HEADER_2X5_8

Front 1394

Illustration	Pin		Signal Name
	1	TPA+	
$1 \square \square 2$	2	TPA-	
	3	Ground	
	4	Ground	
	5	TPB+	
	6	TPB-	
	7	+12V(Fused	(k
	8	+12V(Fused	1)
9 0 0 10	9	Key	
	10	Ground	
Silk Screen		print	Schematic Part
F_1394	H2X	5MZO9	HEADER_2X5_9

Internal Speaker

Illustration	Pin		Signal Name
	1	MONO-L	
$1 \square O 2$	2	Ground	
	3	MONO-R	
	4	Key	
	5	Ground	
	6	Ground	
$7 \cup \cup 8$	7	VCC	
Silk Screen	Foot	print	Schematic Part
SPEAKER	h2x4mzo4h86		HEADER_2X4_K4

Sys FAN (3pin)

Illustration	Pin		Signal Name
	1	Ground	
	2	FANOUT	
02	3	SIO FAN SP	D
	4	Кеу	
Silk Screen	Footprint		Schematic Part
SYS_FAN_1	FAN3MH100		CONN3(FAN3P)

CPU FAN (4pin)

Illustration	Pin		Signal Name
	1	Ground	
	2	FAN POWER	R 12V
	3	SIO FANSPE)
	4	FANOUT	
□ □ ○ 3	5	Key	
○ 4○ 5			
Silk Screen	Footprint		Schematic Part
CPU_FAN	HFAN4M_M1		CONN3(FAN4P)

Clear CMOS

Illustration	Description	Pin		Signal Name
	3 Pin	1	Ground	
		2	RTCRSTJ (C	Connect to ICH)
321	Normal (Default)	3	3 Connect to	VCC_RTC
	Set pin 2 and pin 3 closed			
321	Clear CMOS			
	Set pin 1 and pin 2 closed			
Silk Screen		Footprint		Schematic Part
CLR_CMOS		НЗ№	1	HEADER_1X3

Intruder

Illustration	Pin		Signal Name
INTR	1	INTRUDERJ	
1_0 2_0	2	Ground	
Silk Screen	Footprint		Schematic Part
INTR	H2M		HEADER_1X2

J3 (for customer Acer requested)

Illustration	Pin		Signal Name
4	1	AGPIO1	
20	2	Ground	
Silk Screen	Footprint		Schematic Part
INTR	H2M		HEADER_1X2

J4 (for customer Acer requested)

Illustration	Pin		Signal Name
4	1	AGPIO2	
20	2	Ground	
Silk Screen	Footprint		Schematic Part
INTR	H2№		HEADER_1X2

SPDIF_OUT

<mark>- Illu</mark>	stration	Pin		Signal Name
		1	5V_SYS	
	1	2	KEY	
		3	SPDIF_OUT	
		4	GND	
$ \circ $	4			
Silk Scre	en	Footprint		Schematic Part
SPDIF_(TUC	H4MO2		HEADER_1X4_K2

IRDA

Illustration	Pin		Signal Name
	1	5V_SB	
$1 \square \bigcirc 2$	2	IR_26	
	3	SIO_RSMR	STJ
	4	RESETCON	1J
	5	IR_20	
9 🔘 10	6	6 IR_27	
	7 IR_RE		
	8	IR_21	
	9	GND	
	10	KEY	
Silk Screen	Footprint		Schematic Part
IR1	H2X5MZO10		HEADER_2X5_10

COM2

Illustration	Pin		Signal Name
	1	NDCDB	
$1 \square \bigcirc 2$	2	NSINB	
	3	NSOUTB	
	4	NDTRB	
	5	GND	
9 🔘 10	6	NDSRB	
	7	NRTSB	
	8	NCTSB	
	9	NRIB	
	10 KEY		
Silk Screen	Footprint		Schematic Part
COM2	H2X5MZO10		Header_2X5_10

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of

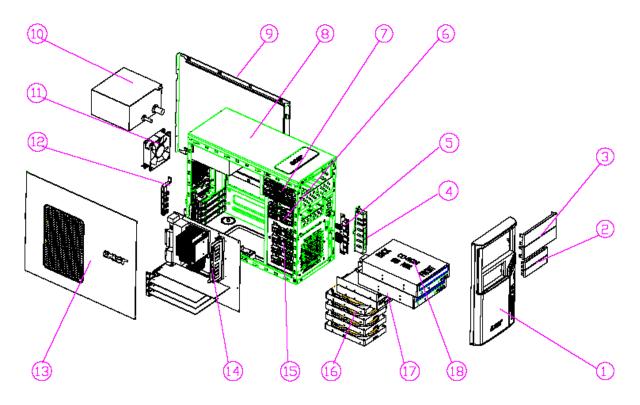
Aspire M1610/ Veriton M261. Refer to this chapter whenever ordering for parts to repair or for RMA

(Return Merchandise Authorization).

NOTE: Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel (http://aicsl.acer.com.tw/spl/, if you do not own a specific account, you can still access the system with guest; guest). For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

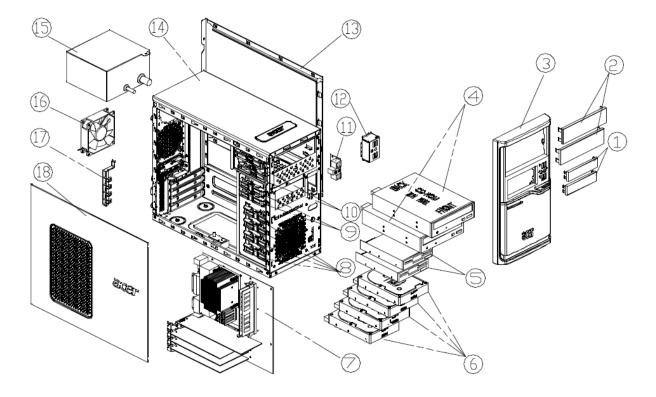
Exploded Diagrams

Aspire M1610



Item	Description	Item	Decription
1	AM10 Main Bezel	10	Power Supply
2	3.25" Cover	11	Fan
3	5.25" Cover	12	PCI Bracket
4	USB Shielding	13	Left Side Door
5	USB PCB-ASM	14	Motherboard
6	FDD Lock Slide	15	HDD Lock Slide
7	CD ROM Lock Slide	16	HDD
8	Chassis	17	3.5" Device
9	Right Side Door	18	CD ROM

Veriton M261



Item	Description	Item	Decription
1	3.5" Filler Panel	10	CD ROM Lock Slide
2	5.25" Rotate Cover	11	USB Board
3	V541 Bezel	12	USB Bracket
4	CD ROM	13	Right Side
5	FDD w/Panel	14	Chassis
6	HDD Disk	15	Power Supply
7	Mothboard	16	Fan
8	HDD Lock Slide	17	PCI Bracket
9	FDD Lock Slide	18	Left Side

Parts Lists

The SPL will update later